UNITED STATES DEPARTMENT OF AGRICULTURE
Weather Bureau —— Bureau of Agricultural Economics

REPORT OF WEATHER AND CROP CONDITIONS IN MONTANA
For the Week Ending Tuesday, July 13, 1937.

Issued jointly by the Division of Crop and Livestock Estimates and the Weather Bureau.
Offices: Fourth Floor, Federal Office Building, Helena, Montana.

The week was characterized by cloudy and cooler weather, and good showers over most sections of the State. Maximum temperatures registered mostly in the 80's, hitting 103 degrees, however, at Great Falls on the 10th, and dropping as low as 68 degrees at Cut Bank on the 12th and 13th and Kalispell on the 13th. Most of the week's good showers occurred on the 12th or 13th, with some good showers falling in the east-central portion between the 7th and 9th. Showers varied in amount, generally from $\frac{1}{4}$ to $1\frac{1}{4}$ inches, except in some south-central and southwestern districts, where the weekly rainfall was less than 1/10th of an inch and too light to be of any real benefit.

Crops and ranges in general were helped by the cool weather and showers, but not before additional injury occurred to dryland crops early in the week. Irrigated crops made good progress generally, although the supply of irrigation water from small mountain streams was reported dropping sharply before the occurrence of the week-end rains. High winds caused some lodging of heavy stands of irrigated grain in the south. Drouth conditions in the northeast continued severe, with little or no prospect of either grain or feed crops in much of that area. Roosevelt County, reporting the worst agricultural condition ever known in that section because of drouth and soil-blowing, received its first good rain (nearly an inch) of the season on July 13th.

The recent extreme heat and dryness have been unfavorable for filling, and have hastened the maturing of winter wheat. The week's rains, however, will be of considerable benefit to later maturing wheat. Harvesting of winter wheat is expected to start on or shortly after July 15th in several districts. Spring wheat and other small grains on dryland were injured to varying extent by the hot weather, but this week's rains have come in time to greatly benefit the entire crop. Early spring grains have headed, and some in the southeast has been turning. Some grain with poor crop prospects or menaced by insects has been cut for hay. Beans and sugar beets are reported normal for this date. Corn making rapid growth during the hot weather is still behind its usual advancement for this time of year. Growth of forage crops was checked somewhat by hot weather, but should respond favorably to present improved growing conditions.

Showers interfered with haying during the last part of the week, and cloudy conditions east of the Divide delayed curing. First alfalfa is mostly in the stack, and the second crop is getting a good start. A good wild hay crop is in prospect for much of the southern and western parts of the State. Lower ranges and unirrigated pastures have declined as a consequence of recent hot weather and dryness, but should improve some with cooler weather and better moisture conditions. High ranges and irrigated pastures continued in good shape.

Livestock are reported fair in the northeast and mostly good to excellent in other sections of the State. Shipping continues in the northeast because of drouth conditions and lack of feed.

Crickets and grasshoppers continue damaging in several parts of the State. Grasshoppers have been spreading in the east, and crickets have reached the egg-laying stage.

TEMPERATURE AND PRECIPITATION DATA, WEEK ENDING JULY 13, 1937

Station	Temperature Highest	Temperature Lowest	Sunshine % of Possible	Precipitation (inches & hundredths) Total This Week	Total since April 1, 1937	Total since Apr.1 to July 14, 1936.
Billings	89	52	*	0.04	6.39	4.41
Bozeman	82	49	*	0.53	8.39	4.43
Cut Bank	90	43	*	0.21	5.82	3.84
Fort Peck	95	56	*	0.53	3.60	- -
Glendive	93	56	*	0.55	4.94	4.62
Great Falls	103	54	*	0.13	3.98	4.13
Havre	96	52	70	1.30	5.94	2.49
HELENA	88	51	74	0.20	3.60	4.43
Kalispell	90	48	96	0.42	5.43	3.90
Lewistown	90	44	*	0.60	5.34	5.90
Malta	96	47	*	0.38	5.88	2.70
Miles City	92	60	52	0.32	4.16	2.44
Missoula	92	54	90	0.08	3.08	4.58
Poplar	98	52	*	0.89	2.30	3.26

*No data.

Series - 1937 - No. 14.
Helena, Montana.
July 14, 1937.

W. E. Maughan, Weather Bureau.
Jay G. Diamond, Division of Crop and Livestock Estimates.

The following county summaries of crop conditions for the week ending July 10,1937 are furnished through the courtesy of Director J. C. Taylor, Montana State Extension Service.

BEAVERHEAD: Moderate to heavy rains in most sections, with good growing conditions. Outlook much improved for crops and grass. Haying delayed due to rain. Shearing completed; no activity in wool or lambs. Grass good but some shortage of stock water on ranges due to springs drying up. Some poisoning of grasshoppers.

BIG HORN: A few light showers. Winter wheat ripening prematurely. Valley crops doing well. Beets making better progress after a slow start. First cutting alfalfa mostly in stack. Harvest of dryland grain crops will start in another week. Range in good shape; cattle doing well. Crickets and grasshoppers doing some damage. Control work still going on.

BLAINE: No precipitation; drying winds forepart of the week, with moderate weather last half. Growing conditions fair. Crops suffered severely from the hot winds. Many fields which looked promising have been burned badly. First cutting of alfalfa well under way, with fair yields being reported. Irrigated crops showed considerable growth this past week. Beet crop for the county can be classed as fair. Grasshoppers spreading rapidly. Livestock in good condition. Shearing about completed with very satisfactory clips received. Range conditions have been deteriorating due to the dry weather. However, conditions are not serious at present.

CARBON: Some cloudy days, but very little rain. Winter wheat beginning to ripen; spring wheat damaged on dry lands due to the drouth and hot weather. First cutting of hay completed. Plenty of irrigation water available. Crops looking good, especially in irrigated sections. Grasshoppers and crickets doing some damage in certain sections of the county, with considerable poisoning being done. Livestock in fair condition. Labor situation fair.

CASCADE: A good shower Monday evening alleviated temporarily the damage from extreme heat. The balance of the week was moderately cool, providing excellent growing conditions for any crops where moisture was available. Winter wheat which survived is practically made and will without further moisture produce some crop. Late seeded spring wheat is in a very precarious condition and will need considerably more moisture to mature, but thus far has not suffered much damage from drouth. Some damage from both grasshoppers and crickets, but extent of damage is very limited. Crops on irrigated land are in excellent condition. The first cutting of hay in some areas not as great as last year, but the quality is excellent. Ranges, cattle, and sheep are in good condition. Ample feed crops will be harvested. Labor situation normal.

CHOUTEAU: Relatively warm the past week, with scattered showers, but in general crop conditions are becoming serious. Winter wheat is turning fast, and the dry, hot weather is setting the spring wheat back materially every day. Range conditions at standstill. Cricket situation more serious than heretofore, with extensive control program being carried on in an attempt to halt their spread.

CUSTER - POWDER RIVER: Extreme heat followed by cooler weather with scattered but beneficial thunder showers. Good rain in Powder River County. Irrigated and flood irrigated crops continue to do well, but most dry land crops do not show much promise as rains came too late. Many grain fields in Powder River County, which would make grain, are being cut for hay because of cricket menace. Haying in range area under way. Late grass making good comeback in south country following recent showers. Many areas still weedy, especially on north side. All stock looking good. Shearing completed, with very little wool out of first hands. Grasshoppers present, but damage unnoticeable. Crickets scattering and starting to lay eggs.

DANIELS: Only a trace of precipitation in eastern part of county. Temperatures extremely high forepart of week, reaching 110 degrees on Monday. Latter part of week not quite so hot. Crop conditions unchanged. Extreme drouth continues. It is almost certain now that no harvest of either grains or feed crops will take place this year. Livestock situation unchanged. Movement of stock out of county to market and pastures continued. It is anticipated that no stock except possibly a few scattered milk cows will be left in county by fall. Nearly all farmers need employment.

DAWSON: Scattered showers, with two severely hot days followed by cooler weather. Moisture benefitting crops, permitting small grains to fill and giving corn considerable boost. Preparations for haying quite general, with feed crops practically assured. Rains will help ranges along and probably help filling of seed in later grasses. Some areas still below par in grazing, however, without favorable outlook. Grasshopper damage spreading.

FALLON - CARTER: Precipitation 0.47 inches general over Fallon and Carter counties. Moisture conditions favorable. Poor to fair crop conditions because of grasshopper situation. In northern Fallon County, crops are being cut in order to salvage hay from grasshoppers. Poison grasshopper bait is being mixed and given to farmers. However, the infestation is so heavy that it is doubtful whether poisoning can retard damage. Livestock conditions good.

FLATHEAD: Dry and hot with some winds, causing the loss of moisture reserves. Small grain crops in a few scattered areas burning badly. Winter wheat is at the critical stage, and moisture necessary to assure an average crop. Spring grains showing up well, but will need moisture soon. Prospects on the whole for a bumper crop are not as good as a week ago. Indications at the present time are for normal yields for all grains except peas, which have deteriorated further the past week, d

(Continued on Page 2.)

FLATHEAD: (Cont'd.) to Rhizoctonia. No insect damage in the county. Condition of livestock very good. Range still good. Pastures in a few cases are getting short. Labor adequate.

FERGUS: Much winter wheat being cut for hay. Good bit of spring wheat will be cut for hay if it gets far enough along to make hay. Some fields are being re-summerfallowed in order to control weeds. Alfalfa mostly all cut with not over one-fourth yield on the acres actually cut. Livestock are doing very well with plenty of grass and water at present to carry them along. Grasshoppers will account for very heavy damage to range in near future. Some damage already done. Hopper poisoning work is increasing, with excellent results reported from poison. Some folks not poisoning due to not having sufficient crops to save.

GALLATIN: General rain forepart of week; balance of week partly cloudy. Average temperature lower than previous week. Haying delayed because of rain, and cooler cloudy weather has delayed curing. Some stacking done latter part of week. Irrigated grain continuing rapid growth to the extent that wind during the week has lodged much of the earlier plantings. Grain in parts of the county, particularly west and north, showing effects of lack of moisture. Average yield in these areas, however, will exceed that of last year. Preparation being made for winter wheat harvest. Later right ditches shut down and other ditches reduced to actual rights. Mountain streams flow dropping rapidly. Ranges and pasture continue in excellent shape. 300,000 lbs. of wool in the Gallatin Pool offered for sale but no bids accepted.

GARFIELD - PETROLEUM: Few scattered showers during the past week. General growing conditions good. Crop conditions unchanged. Livestock condition good.

GLACIER: Weather remains hot and dry; growing conditions fair; some fields showing the lack of moisture. Spring wheat, generally, heading out, the main stalks standing the dry weather in good shape, and the late seedings standing the heat and drouth better than the early seedings. First crop of alfalfa almost 100% up; range grasses pretty well headed and matured, and grass is turning brown. Some damage to shelterbelts and ornamental trees being reported by the Blister Bugs. Sheep and cattle doing excellent and are in good shape. Labor not too plentiful. Some scattered reports of grasshopper damage.

HILL: Preceipitation .09 inch. Extreme high temperatures have hastened the maturity of early crops and have caused some burning of later crops. Grasshoppers are moving into the crops. Ranges are drying up rapidly. Livestock in fairly good condition.

JUDITH BASIN: Precipitation slight. Hot winds; temperatures high. Soil moisture extremely low. Spring crops seriously in need of moisture. General crop prospects very poor. Grasshopper and cricket infestation heavy and damage excessive. Range drying up again after being revived by local showers. Feed situation on range becoming serious; most parts of the county will be unable to hold livestock on range until August. Most of livestock in fair condition. A high percentage of the farmers will need labor this summer and fall.

LAKE: No precipitation; warm with some winds. Some of the late seeded dryland grains starting to burn. Irrigation water getting short. Winter wheat ripening. Potatoes and beets making good growth. Strawberry crop in full production. Haying progressing rapidly with good yields. Lower ranges are starting to get dry. Farm labor scarce for haying.

LEWIS & CLARK - BROADWATER: Cooler weather than previous week, with good growing conditions. Few local showers. Showers helped winter wheat districts in counties, but more moisture needed for proper filling in both counties. Haying well along with generally less than normal yield for first cutting. Livestock in good condition but ranges need moisture. Parts of Broadwater County especially dry. Grasshoppers under control. Dusting of crickets started in Sieben area. New bands have been located in both counties.

MADISON - JEFFERSON: Local showers in some localities sufficient to help crops and ranges. Heat has caused crops to burn badly in many places. Dryland grains very spotted. Where water has been available, irrigated crops have generally improved. Haying in full swing, with most of the yields reported below normal. Grasshoppers are now doing a great deal of damage in the north half of Jefferson County and along the North Boulder River, as well as over a large portion of the eastern half of Madison County. Higher mountain ranges reported to be good. The lower ranges are in worse condition than a week ago. Not enough local men for haying.

MEAGHER: Showers; warm. Soil moisture improved. Grass helped by showers. All crops helped some by rain. Crops not burned yet. All gardens doing fine. Haying to start soon. Livestock in very good condition; flies bothering. Supply and demand of labor about equal. Crickets increasing, but control campaign to start soon.

MUSSELSHELL - GOLDEN VALLEY: Extreme heat, and heavy local showers. Winter wheat that was not damaged by drouth and wind early in the spring will make a very good crop in the Big Coulee and O'Brien areas in Golden Valley County unless something unforeseen happens. The wheat in Musselshell County will not be nearly as good. In many places in Musselshell County the wheat is burning. The corn acreage in both counties is tripled over any year for the last eight years. Corn in many fields is knee high already. The livestock show the effects of having plenty of grass, which they have had for quite some time. The livestock are in very good condition in both counties. (Continued on Page 3.)

PARK: Warm weather and showers, causing crop outlook to be continued good. First crop of alfalfa hay about half stacked. Spring grain heading out. Winter rye fields looking very good, but beginning to suffer grasshopper damage. Livestock in good shape due to best grass in years. Labor situation about balanced, but farmers feel unable to pay wages that Government agencies are paying. Grasshopper poisoning being done in all parts of the county, particularly in the Wilsall area. Cricket crews working in three areas.

PHILLIPS: Dry and hot with moderate winds. Losing moisture rapidly, and growing conditions becoming less favorable. Dryland crops making little headway. Very little grain expected, but feed will probably be enough to carry through without shipping out livestock. Some wheat will be harvested, but difficult to estimate amount. Hoppers doing some damage, but light demand for bait. Webworm damage reported to late crops. Generally sufficient range grass and water to carry stock till fall. Livestock condition improved.

PONDERA: Weather dry and hot. Gains made after the June rains practically offset by hot weather. Temperature ranging around 100 degrees, although no winds accompany it. Young wheat making slow advance in growth - nearly at a standstill. Early seeded wheat heading out. Prospects for crop conditions are materially decreasing since the rains of June 9 and 10. Crops will probably be about 45% of normal, if weather cools down. It appears that due to heat and drouth feed crops will be increased very little. Some roughage and some harvest of early seeded barley. Sugar beets making splendid growth and water insures prospects for a fair crop. Some places very weedy and approximately 20% has been abandoned. Range pasture beginning to dry up. There will be some mature forage to hold livestock, but this will mean early fall shipment. Lambs selling from $7.00 to $8.00, with most of them hanging around $7.50. Labor balanced.

PRAIRIE: Light local shower Thursday evening in Terry, which was a great relief after the heat of the forepart of the week. Crops burned some in the heat the forepart of week. It is hoped that the cooler weather of the latter part of the week will bring them back, along with the shower of Thursday evening. Grasshoppers numerous in all parts of the county and are moving in on crops. Many of the farmers are actively engaged in combatting them. Livestock is continuing to improve in condition. Little activity in the local wool market. Labor supply is ample.

RICHLAND: Continued hot and dry weather, with only slight precipitation. Not enough moisture received to be of any particular value. Grain crops in general are dried up too much to be benefitted by any moisture now. Ranges are dried up and farmers are moving their livestock every day to market. The worst conditions as far as livestock feed is concerned are in the western part of the county. Blister beetles causing considerable damage to garden crops and potatoes. Farmers are anxiously waiting the WPA program so they can get employment for the summer and fall. This program is absolutely necessary for them to get through the winter.

ROOSEVELT: Continued drouth. One very light shower over eastern part of county. Very hot period July 4, 5, and 6. No change in crop situation. No crop in sight. Movement of livestock continues, with many farmers reducing their herds to six or eight animals. General agricultural condition is the worst known in this section.

ROSEBUD: Temperatur far above normal first part of week. Occasional local showers throughout the week. Low precipitation. Irrigated crops doing well. Dryland grains nearly all taken by the drouth and insects. Range starting to show slight signs of drouth, but generally in good condition in south half of the county. North half extremely short on range. Crickets are moving closer to town; reported to be taking several good stands of spring wheat.

SANDERS: No precipitation. Hot and dry. All crops badly in need of rain. Winter wheat ripening fast; will be ready for harvest about July 15, with about 60% normal crop. Spring grain heading very short, with prospects for poor crop. First cutting hay mostly in stack. Alfalfa seed crop going into seed forming stage with indications of fair yield. Livestock in good condition. Higher range very good condition. Range cattle shipments going to market.

SHERIDAN: Continued dry; extreme heat one day; high wind several days. Grain crops gone with few exceptions. Some feed crops may be saved if grasshoppers are poisoned. Continued trucking and shipping of livestock to market and pasture. Farmers now looking for range and pasture; sheepmen shipping to grass at eastern points of North Dakota and southwestern Minnesota. Need for feed and hay to carry over breeding herds and dairy cattle increases. Increasing need for work. WPA labor needed for grasshopper bait mixing. Supply of bait has been sufficient to date

STILLWATER: Generally cool during week. Few scattered showers. Crop conditions generally good. Cricket infestation serious and doing some damage. Irrigated crops looking good. All livestock in good condition. No surplus of labor.

SUN RIVER PROJECT: Hot and dry; 101 maximum temperature. Crops growing fast where water can be applied. Some fields burning from inadequate irrigation. Most farmers in the midst of haying.

SWEETGRASS: Precipitation .28 inch. Growing conditions have been excellent the past week on irrigated lands due to warmer weather. Dry land is suffering for want of moisture. Rye on dry land has been harvested. Winter wheat is ripening fast. Hay on dry lands has been harvested. Hay on irrigated farms is being harvested, with a 40 to 50 per cent crop of alfalfa. There is a normal crop of wild hay. Grain on irrigated land is growing very rank and lodging. Range grasses are maturing. Livestock doing well on pasture and range. Insects doing considerable damage.

(Continued on Page 4.)

SWEETGRASS: (Cont'd.) Unless moisture continues, it is doubtful whether the crops in places will be able to mature for grain. Will probably be cut for hay.

TETON: High temperature 98 degrees, with hot drying winds. Above-normal high temperatures with hot wind all week. Crops of Pendroy area seem to be holding up fairly well, as well as the early seeded crops in the eastern part of the Diamond Valley area. Present indications are that our crop has deteriorated to approximately 30 per cent of normal at the present time. No rain since the middle of June along with the heat has certainly been bad. Haying of wild hay getting under way the first part of this coming week.

TOOLE: Extremely hot, with drying winds. A similar condition to last year exists in the county at the present time. In most fields there is adequate moisture, but the searing effect of the winds has materially reduced crop prospects. Unless rain is received very shortly and unless the temperature lowers, fields will be materially reduced throughout the entire county. Wool clips running very good. All livestock in excellent shape. Grass conditions very good. Labor plentiful.

VALLEY: Two days of cool weather with the balance of the week hot and no precipitation. Crops completely gone in the dryland section. With lots of moisture, some sections will probably get some feed. The irrigated section is looking fair. Sugar beets making fair growth. Alfalfa haying in full swing. Some alfalfa growers are leaving their first cutting for seed, which has been slow in setting on to date. Grass is short. Some stock being moved at this time. Lambs, however, are doing very nicely considering feed and weather conditions. No labor needed. Sugar beet webworms are bad, and considerable poisoning is being done. Worms are taking what little thistles are coming and have come up. Hoppers are bad in certain areas only.

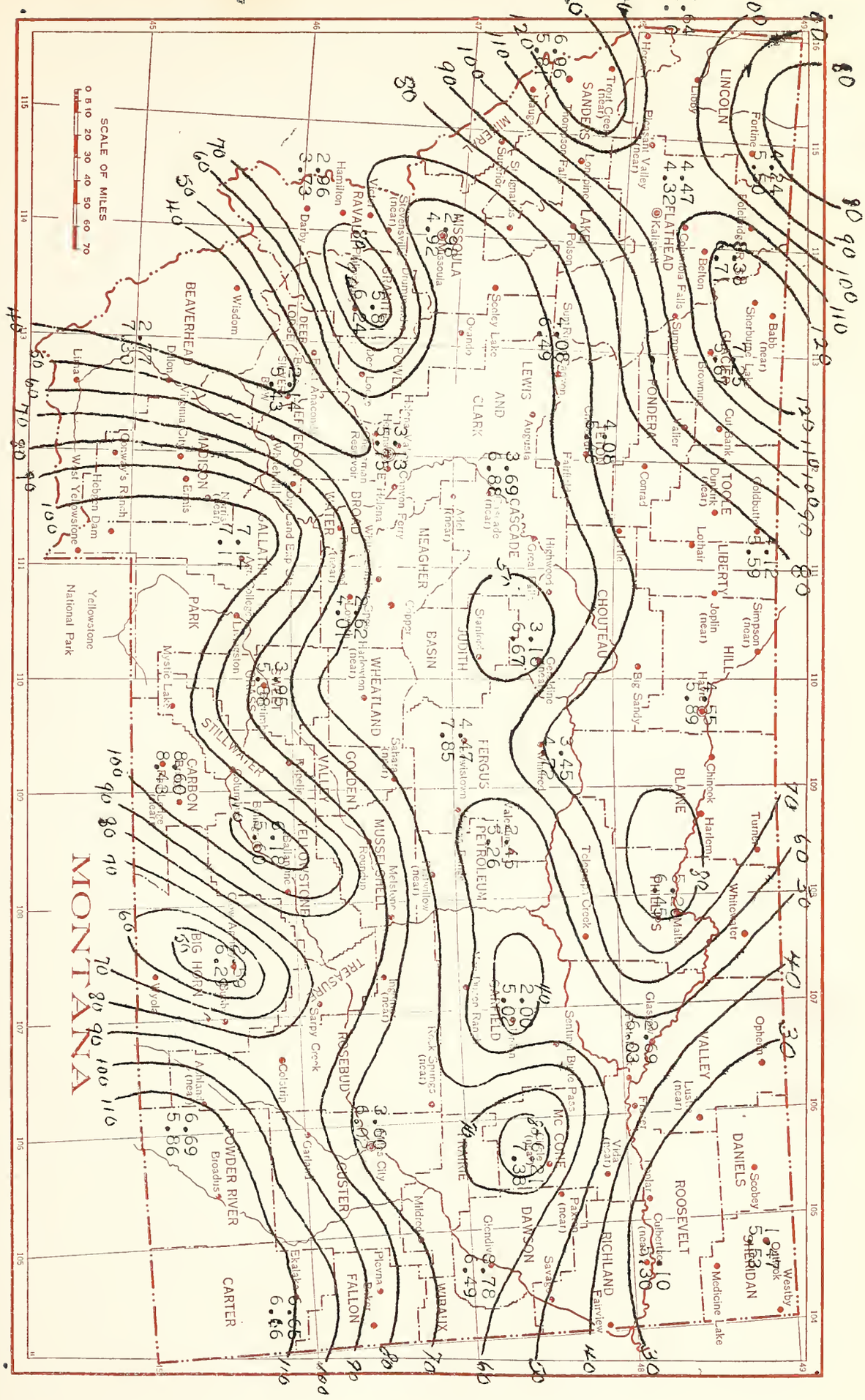
WHEATLAND: Scattered, light showers during the past week; cool weather latter part. Haying started in the county during the past week.

WIBAUX: Sunday and Monday extremely hot. Very hard on remaining crops. Cooler weather remainder of the week. Precipitation at Wibaux June 8 and 9, 1.15 inches. More in some portions of the county, but less in the northern part and parts of the southern part of the county. Rain will help corn and gardens. Grasshoppers very bad. Poisoning campaign in full swing, but hoppers flying in. No improvement in wheat and grain crop. Present outlook Wibaux County will raise only enough wheat to plant county acreage next year. Some livestock beginning to move. Recent rains may improve ranges.

YELLOWSTONE: Crops in northeast end of county and Broadview District fair, as lack of moisture and some damage from hoppers have cut down prospects; in Molt, Acton district crops are good. Some farmers cutting wheat for hay to save it from hoppers. South of the river, prospects for crops good except for danger from crickets. Some wheat beginning to ripen and some harvesting will start in another two weeks. Irrigated crops east of Billings suffering badly from lack of water due to break in the B. L. & I. ditch. Ditch should be repaired in another week or ten days. Crops west of Billings very good with the exception of some loss due to the flood. Beets looking very good. About half of first cutting of hay completed, with haying in full swing. All livestock in good condition. Grass and range in all parts of county excellent due to recent rains. Crickets are still moving into crop land, and are doing considerable damage in some localities. It is almost impossible to estimate the damage and there is still considerable danger of further crop losses.

* * * * * * * * *

Helena, Montana,
July 14, 1937.



This map shows the percentage of normal precipitation that has occurred in Montana during the first three months, April to June, inclusive, of the 1937 crop growing season.

The upper of each typed pair of figures indicates the actual amount of precipitation that occurred in that respective area during the period April to June; the lower figure of the pair indicates the normal precipitation for the same period.

Lines are drawn for each 10 per cent of normal.

U.S. Weather Bureau,
Helena, Montana

UNITED STATES DEPARTMENT OF AGRICULTURE
Weather Bureau —— Bureau of Agricultural Economics

REPORT OF WEATHER AND CROP CONDITIONS IN MONTANA
For the Week Ending Tuesday, July 20, 1937.

Issued jointly by the Division of Crop and Livestock Estimates and the Weather Bureau.
Offices: Fourth Floor, Federal Office Building, Helena, Montana.

Showers that were light in some western and south-central sections, but reaching cloudburst proportions in the drouth counties of northeastern Montana, were accompanied by relatively cool and cloudy weather through most of the week ending July 20th. Clear and much warmer weather came at the close. Damaging hail was reported from parts of Pondera, Custer, and Rosebud counties. In Daniels, Roosevelt, and Sheridan counties, where rainfall ranged from two to five inches and did considerable damage by flooding, the moisture came too late to be of any benefit to this season's crops already destroyed by drouth. Elsewhere, the additional moisture and cool weather were generally favorable to crops that have escaped earlier destruction, and gave renewed hope to stockmen for summer and fall feed. Irrigated crops have continued to make progress, and in most areas water supplies are now adequate for current needs.

Non-irrigated crops are unusually spotted as a result of earlier drouth, and wind damage. June and July rainfall has brought on a heavy growth of weeds and thistle that in many cases have completely choked out late sown grain crops. Other late grain fields are still showing a very short growth, with the prospect of making grain still doubtful. Early sown grains that escaped damage by blowing or located in areas where subsoil moisture conditions were more favorable have made a good response to the recent rains. In the drouth area of extreme northeastern Montana, crops are almost a complete failure, while in most of the east-central and a few central Montana counties, it is now apparent that June and July rains have come too late to prevent widespread crop failure.

The bulk of the first cutting of alfalfa is now in stack, and recent rains have improved the outlook for the second crop. Harvesting of winter wheat has begun in parts of Cascade, Chouteau, and in parts of the Yellowstone Valley area. The crop is turning in the western counties. Spring wheat, except where already a failure, has improved, although the abandonment of acreage will be heavier than expected earlier.

Livestock is reported as slightly improved along with the improvement in range and pasture feed. In the drouth area of northeastern Montana, pasture is still very poor, and many localities are still devoid of grass. Considerable sheep and some cattle have already been moved out of Daniels, Roosevelt, and Sheridan counties, and very little livestock is expected to remain to winter in this area due to the lack of winter feed. Over most of the rest of the State, however, both pasture and winter feed prospects are now much better than at the beginning of the month and livestock is making seasonable gains.

Grasshoppers continue to be reported in large numbers from many counties, and vigorous poison campaigns are under way over a wide area. The heaviest damage to date is reported from the northern and northeastern counties. Cricket damage is tapering off and dusting campaigns are less intense.

TEMPERATURE AND PRECIPITATION DATA, WEEK ENDING JULY 20, 1937

Station	Temperature Highest	Temperature Lowest	Sunshine Percent of Possible	Precipitation (in. & hundredths) Total This week.	Total since Apr. 1, 1937	Total since April 1 to July 21, 1936.
Billings	94	55	*	0.38	6.77	4.53
Bozeman	84	42	*	0.42	8.81	4.45
Cut Bank	89	47	*	0.16	5.98	3.84
Fort Peck	98	56	*	0.22	3.82	1.68
Glendive	95	53	*	1.19	6.13	4.63
Great Falls	91	52	*	0.80	4.78	4.16
Havre	92	56	54	0.65	6.59	2.53
HELENA	90	50	76	0.17	3.77	4.46
Kalispell	88	50	72	0.26	5.69	3.90
Lewistown	90	45	*	0.55	5.89	5.90
Malta	95	54	*	0.57	6.45	2.70
Miles City	96	54	66	1.27	5.43	2.48
Missoula	94	48	66	0.18	3.26	4.58
Poplar	95	57	*	2.50	4.89	3.26

*No data.

Series - 1937 - No. 15.
Helena, Montana,
July 21, 1937.

W. E. Maughan, Weather Bureau.

Jay G. Diamond, Division of Crop and Livestock Estimates.

The following county summaries of crop conditions for the week ending July 17, 1937 are furnished through the courtesy of Director J. C. Taylor, Montana State Extension Service.

BEAVERHEAD: Heavy rains general over county; good growing conditions. Crops good. Very slight damage to cut alfalfa; haying delayed; some hail damage in the Dell section. Little activity in wool last week, with several small lots and a few large clips sold. Some lambs being contracted, 8½¢ top. Livestock in good condition, with outlook for heavier lambs due to good range. No grasshopper damage to crops.

BIG HORN: A few scattered showers during the week. The cooler weather has made the growing conditions very good. In parts of the county the crops are parched because of the lack of moisture. The south half of county is especially good. Harvest will start in a few days. Winter wheat maturing rapidly and spring wheat making good progress. Beets making good progress. Beans and corn advancing rapidly. Range in good condition and cattle accordingly. Crickets doing some damage as well as hoppers in a few isolated places; control work still continues.

BLAINE: About 2½ inches of precipitation during the week. Moisture conditions are very satisfactory at present. All crops that were not damaged by soil blowing and drouth have shown a great improvement during the past week. Irrigated crops in the valley have shown good progress during the past week. Grasshoppers still doing damage to crops and range in the south end of the county. Livestock in good condition. Range greatly improved due to the recent moisture. Prospects for a second cutting of alfalfa on the mountain ranches greatly improved.

CARBON: Heavy showers fell in the western portion of the county. A 0.3 inch shower in the Bridger territory and an 0.85 inch precipitation in the Red Lodge area. Much hay was damaged due to the rains. Wheat is ripening. Grasshopper damage on the increase; much poisoning work being done. Livestock in good condition. Shortage of labor, much of which is due to cricket work being carried on.

CASCADE: Cool, cloudy weather, accompanied by scattered, frequent showers, some cloudbursts and a small amount of hail, have contributed to the weather the past week. The rains that have fallen have been of considerable value to all crops excepting hay which was down, and the drouth which threatened a week ago has been broken. Winter wheat is turning, and late seeded spring wheat now shows promise of making a crop. Grasshopper damage is very slight. A heavy infestation of Mormon criekcts in the Highwood area threatens to destroy crops and spread the insects to other sections of the county. A large crew of men are working with dust guns and patrolling the line between crop land and range, and thus far have been able to protect crops. This fight must continue at least until the 1st of August. Crops on irrigated land are in excellent condition. Beet thinning is complete and the second hoeing is under way. First cutting of hay is about 85% in the stack, with lighter than normal yields reported.

Livestock are in excellent condition, the late rains having provided ample grass in the hills and on the ranges. It now appears that there will be sufficient feed produced to care for all the livestock in the county this winter.

CHOUTEAU: Heavy showers occurred in almost all parts of the county during the week and growing conditions are very much improved. Cool weather prevailed during most of the week. Spring wheat prospects are improved and feed crops are much revived with the recent rains. Winter wheat is turning fast and will be benefitted little by the rain of the past week. Range conditions are improved. Grasshopper situation not serious. Few scattered reports. Mormon crickets continue to be a serious menace and control work is being continued in full force.

CUSTER - POWDER RIVER: Continued cooler, with occasional thunder showers. Heavy downpour with some hail at Miles City Thursday evening, 0.64 inch falling within twenty minutes. No damage of any consequence. Many dry creeks running, with Powder River near flood stage in Broadus Wednesday. Dryland grain crops going mostly for hay. Corn and millet continue to do well, with recent showers. Irrigated crops, including second crop alfalfa, beets, and potatoes, look good, with water supply still plentiful. Heavy infestation of Army worms in irrigated areas. Damage so far mostly to grain and young alfalfa. Many oat fields stripped of leaves and grain, leaving only stems. Poison bran being distributed to farmers, with fair results reported. Most irrigated grain going for hay to avoid worm damage. All stock gaining. Grass and water ample on the range in south; north side still somewhat short.

DANIELS: Large rains, amounting to approximately four inches as an average over the county, fell during the week. A large percentage of the water was lost in run-off, resulting in washed out roads, bridges, and general floods. General cloudy weather and moderately low temperatures prevailed. Rains fell too late to be of any benefit to crops. Some late feed crops will be planted. Farmers who were making plans for moving of livestock are now waiting temporarily to see what the feed situation may be. It is expected that weeds will make sufficient growth to keep stock from starving until fall. All farmers in need of employment.

DAWSON: Cool and scattered showers, covering practically entire county, during week. Early grain crops filling, with moisture and cool weather favorable. Haying in progress. Grass and stock conditions about same. Hopper and army worm damage reported.

(Continued on Page 2.)

FALLON - CARTER: Moisture conditions good. Growing weather excellent. Temperature rather cool for this time of the year, making it ideal for grains to fill properly. Crops ripening. Some grain already cut for hay where grasshopper damage is severe. Oats and rye being cut for hay. Crops good in scattered localities. Livestock condition improved. In spite of many grasshoppers, grass shows excellent growth.

FERGUS: Heavy showers over most of county during week; precipitation 1.15 inches. Cool weather during week beneficial to growing crops, especially spring wheat. Some spring wheat being cut for hay where drouth and grasshoppers are doing considerable damage. Alfalfa practically all cut, with low yields reported. Livestock continuing good, with plenty of water and grass. Grasshoppers bad in range areas. Grasshopper poisoning still heavy, with good results being reported.

GALLATIN: Stacking of alfalfa under way now after period of delay due to wet weather. Some hay damage because of bleaching in fields. Canning pea harvest under way. Winter wheat ripening fast. Prospects of combining within week or ten days. Barley ripening under irrigation. Oats and spring grains still generally green. Reduced supply of irrigation water continues. Poisoning of crickets and grasshoppers in progress. Some shipments of fat lambs.

GARFIELD - PETROLEUM: General precipitation throughout both counties. Weather cool and cloudy during greater part of week. Growing conditions good. Some feed crops yet in good condition. Favorable growing conditions at present.

GLACIER: Generally cold this week, with a few local showers; warmer today. The cold weather of the past week helped the crops considerably, and saved many fields from total destruction. All spring grains generally headed out, although some fields are extremely spotted by reason of delayed germination this spring. Rye hay being harvested. Oats maturing rapidly and first crop of alfalfa up. Pastures in excellent condition. Stock in good shape. Some lambs shipped from western part of the county. Some slight damage from mature hoppers.

HILL: The precipitation of the past week will help crop conditions considerably; grain which is heading will be especially benefitted. Ranges are improving. Livestock condition also improving.

JUDITH BASIN: Cloudbursts in several sections of the county. Heavy run-off reported in Utica area. 1.06 inches precipitation at Stanford Wednesday, with scattered showers early part of week. Temperatures moderate. Rains have improved range conditions. Too late to help fall and early spring grain. Only the western section of the county will harvest grain. Hay crop about 10% of normal. Soil blowing subsided somewhat the past week. Grasshoppers and crickets doing excessive damage. Range conditions expected to improve since rains. Prospects for feed very poor. Heavy marketing of sheep and cattle expected. Will need labor for over 50% of farmers.

LAKE: Scattered showers over most of county did much to improve the spring grain, peas and grass. Haying nearly completed. Winter wheat about ready to harvest. Some of early peas are being cut. Sugar beets are making rapid growth. Irrigation water getting scarce as the mountain streams continue to drop. Livestock are generally in good condition. Ranges are in good condition. Grasshoppers doing some damage in a few sections. Crickets are being held under control.

LEWIS & CLARK - BROADWATER: Showers in both counties, with rains in some areas reaching cloudburst proportions. Weather rather cool for best growing conditions. Rains were of value to spring grains, and also to winter wheat which is now in the cereal stage. First cutting of alfalfa practically all in stack; second cutting of alfalfa receiving good growth start. Ranges improved by rains in both counties and especially west and southern parts of Broadwater County. Feed situation for fall and winter has improved. Dusting of Mormon crickets tapering off because of maturity of insects. Scattered poisoning done to protect small crop acreages.

MADISON - JEFFERSON: Cooler than during previous week, with showers that brought moisture in quantities large enough to be beneficial to crops and range lands in nearly every section of the two counties. Moisture conditions in the surface soil are as good or better than they have been for a number of years at this time of season. Snow fell in high mountains. Growing conditions good. Dry land grains headed very short, and are starting to turn. Rains during week added enough moisture to practically assure filling of grains on dry land, and greatly helped grains on irrigated land. The dwindling supply of irrigation water was somewhat replenished. The rains delayed haying operations, and some hay crops were damaged. Grasshopper and Mormon cricket activity increased during the week, but very little interest being shown in poisoning. In localities where hoppers and crickets are not prevalent, rains greatly improved conditions on range lands. In other areas, insects offset the benefits received from the rains. Labor still in demand.

MEAGHER: Good rains and showers over most of county are too recent or too insufficient to effect grass so far. Grazing at high altitudes very good. Crops not improved over last week. Grass not yet recovered where burnt. Considerable insect damage to crops in some sections. Livestock in good condition. No sales on cattle. Haying labor demands now exceed supply a little. Grasshoppers continue to hatch and favor prospects of a serious infestation in southeastern third of county. Cricket infestation has spread; not as yet migrated.

(Continued on Page 3.)

(Continued on Page 3.)

(Continued on Page 3.)

MISSOULA: Hot and dry first of week with cooler weather and a few light showers middle and last of week. Haying in full swing and about half completed; has not started yet in higher valleys. Yields probably 75 to 80 per cent normal. Winter grain ripening. Spring grain filling. Sugar beets and potatoes making good growth. Irrigation water plentiful in Missoula River, but short from all mountain streams. Sour cherries coming on market; good yields. Upper ranges good to fair; lower ranges and pastures dry and short. Grasshoppers doing some crop damage.

MUSSELSHELL - GOLDEN VALLEY: Cooler all this week with continued local showers. All vegetation is making rapid progress in growth. Outlook favorable for good crops in certain sections of the counties. The winter wheat is very near maturity in many fields. Feed crops are growing rapidly. Livestock looks good as continued showers have improved the condition of the range land.

PARK: Weather cool; scattered showers; general growing conditions good. Haying in full swing, possibly half completed. Hay crop generally good. Grasshoppers serious only in scattered localities. Supply of irrigation water holding up well. Grain crops generally good, and rye harvest about to commence. Winter wheat headed out and spring wheat headed out in lower altitudes. All wheat promising fair yields. Range conditions excellent due to frequent showers. Grass better than for many years and livestock doing fine.

PHILLIPS: General rains covering entire county this week. Reports indicate a variation of from 0.5 to 5 inches, with heaviest rains south of Milk River; 0.31 inch recorded at Malta in three showers. Cooler. Rains came too late for most dryland crops, although some wheat may yield 10 to 15 bushels. Generally, however, crops will be extremely short. Irrigated crops generally good and recent rains have made up for water shortage. Livestock condition good. Range picking up and plenty of water. Prospects good for winter feed and range.

PONDERA: Cloudbursts in the vicinity of Conrad and Brady sections, accompanied by hail, did considerable damage to growing crops. Wheat in these areas was heavily damaged, and in some cases total losses are reported. The downpour resulted in a heavy runoff, causing floods which destroyed fences and some livestock losses. In other sections, the timely rains were very beneficial and improved the prospects for range grass, feed crops, and small grains. Late seeded spring wheat progressing rapidly.

PRAIRIE: Scattered showers and cool weather kept late crops and weeds on the range growing. Crop conditions have been favorable. The area south of the Yellowstone River will, in general, get their seed back, but the area north of the Yellowstone River will get very little seed. Resources of the farmers are very low, so that it will be necessary to sell the seed to have something to live on this winter. Grasshoppers have reached the adult stage, and are moving in on crops. Livestock continues to improve in condition, as the showers have kept the weeds green, which are growing on the range.

RICHLAND: 1.34 inches of rain has fallen since July 9th. Crop conditions improving. Dryland farmers in most parts of the county are hopeful of getting some feed crops. Crops in the valley are looking good except for the recent outbreak of army worms. Recent moisture will no doubt delay shipment of livestock to a certain extent, but there has not been enough moisture to insure winter feed as yet. Moisture in the western part of the county is still deficient, as this area received less than the irrigated valley. Severe outbreak of grasshoppers--the first in the county since 1915. Farmers are spreading poison very extensively in the valley. Great deal of damage being done to all crops, especially grain crops, and not very good results in killing being obtained.

ROOSEVELT: The first good rains of the year reached the county July 13. Precipitation by end of week varied from 2 to 6 inches. Extreme northeastern portion of county still dry. Rains will not change crop prospects, but may make a little feed. Some seeding of corn, millet, and cane will be attempted as soon as fields dry sufficiently. Hoppers numerous and damaging feed crops.

ROSEBUD: Precipitation reached 0.61 for the week. Generally cool weather prevailed. Rain covered the entire county. Cloudburst in south part of county. Rains have revived the corn and range grasses. Irrigated crops are doing very well. Wheat cutting began the first part of week. Crickets have destroyed a large part of dryland crops. Range starting to burn badly in north part of county. Livestock in good condition. Army cutworms are appearing in the irrigated districts north of the river; taking wheat and oats faster than it can be cut in the green for feed.

SANDERS: Precipitation for the week - 0.52 inch. Generally clear and warm, with ideal growing conditions from good rains over most of the county. Winter wheat advanced to ripened stage and harvest starting with binders. Good quality wheat, but about 50 per cent of normal yield account of poor stand from low moisture conditions. First cutting hay crop in stack. Second cutting making very little growth except under irrigation. Gardens and truck crops in good condition and greatly benefitted by recent rains. Livestock in good condition. Range on higher altitudes very good with ample moisture supply. Range cattle moving to market rapidly.

(Continued on Page 4.)

SHERIDAN: Precipitation one to five inches, varying over county; heaviest in south and southeast sections. Cool. Rain too late to benefit grains. Some late seeding of feed crops may produce feed if frosts do not injure and if favorable moisture conditions continue. Movement of livestock continues; sheep being moved to Minnesota; also some sold to southeast Montana area. Approximately 175 cars of livestock have moved out. Continued need for work. Grasshopper mixing crew at work; bait available at Reserve for south half of county.

STILLWATER: Generally cool during week, with scattered showers in several parts of county. Crop conditions generally good. Cool weather helping to fill heads. Some rye being cut past week. Harvest of some winter wheat will start next week. Irrigated crops all look good. First cutting of hay nearly completed with fair yields. Cricket situation still serious, with poisoning and dusting in full swing. Livestock in good condition. One or two consignments outside of wool pool. Little inquiry as yet for lambs.

SWEETGRASS: Precipitation, just a trace. All crops growing rapidly on irrigated land. Alfalfa - 75% in the stack. Dry land winter wheat harvest is started. Estimated average of 3 to 10 bushels. 50% of dry land grain crop burned out or cut for hay. Local showers holding balance of spring grains. Livestock conditions still improving on pasture. A few more sales of lambs. Culling dry cows for markets at a standstill. Insects doing considerable damage in localities.

TETON: Days mostly cool, with rains in the northern and southern parts of the county. 1½ inches of rain fell in the Bynum area and extended eastward. No great damage has been reported from the heavy rainfall which fell in a little less than an hour. Crop conditions for the county as a whole have not improved. Intense heat and hot winds a week ago did damage to crops of this county. In the western part of the county haying has been delayed due to too much rain. Most hay crops pretty short due to shortage of moisture during growing season. Shearing completed.

TOOLE: Scattered showers during the past week over much of the county. Precipitation light to heavy depending upon locality. The northern and southern parts of the county have had very good rains, and it is expected this is sufficient to carry the crops through. The central area in the county needs more rain soon as fields are starting to burn in this locality. The wool clip averaged from one to three pounds heavier than last year. Cattle and sheep in excellent condition, with grass in good shape. Assessment figures show considerable decrease in cattle from last year. Sheep numbers remain constant.

VALLEY: The forepart of the week was characterized by few local light showers, and the balance of the week by hot weather until Wednesday afternoon, when a heavy shower covered most of the county. Weeds may make some feed. Moisture received too late to do a great deal of good, particularly in the dry land sections, other than to possibly bring out thistles, which may make some pasture and a little feed. Livestock holding their own, but considerable numbers being moved.

WHEATLAND: Heavy shower first part of week; remainder of week cool. Haying is well under way all over the county.

WIBAUX: Precipitation at Wibaux 0.90 inch in three rains. Growing conditions good except for grasshoppers. Moisture conditions good in all parts of the county, but too late for any grain crops. There will be some hay, providing the hoppers let up. Wheat crop will not pay for harvesting. Some livestock is moving. Livestock should improve some from now on.

YELLOWSTONE: Cool, cloudy weather during the week. Precipitation 0.38 inch. Crop conditions fair to excellent throughout entire county. Dryland crops north of the river fair to good. Dryland crops on the south side of the river excellent despite cricket damage. Extreme northeast corner of the county suffering from lack of moisture. Irrigated crops excellent except that area under the B. L. and I. ditch, which starts running water Saturday. With the cooler weather and showers, damage not too serious even under this ditch. Winter wheat harvest started. All livestock in excellent condition. Grass and range excellent. Most of surplus labor being used on cricket control campaign and on repair work on irrigation ditches and fairgrounds. Mormon crickets moving away from irrigation districts, headed south. Heavy slaughter of crickets during the past week, with definite results accomplished in control. Approximately 1/8 to 1/4 of crops in cricket area damaged, but with moisture as it has been, crops are still excellent. Grasshoppers doing some damage in Broadview district.

- - - - - - - - -

Helena, Montana,
July 21, 1937.

UNITED STATES DEPARTMENT OF AGRICULTURE
Weather Bureau —— Bureau of Agricultural Economics

REPORT OF WEATHER AND CROP CONDITIONS IN MONTANA
For the Week Ending Tuesday, July 27, 1937.

Issued jointly by the Division of Crop and Livestock Estimates and the Weather Bureau.
Offices: Fourth Floor, Federal Office Building, Helena, Montana.

Most of Montana's farm areas went rainless during the past week, when temperatures rose to a range of daytime maxima of from 90 degrees in western portions to 103 degrees in eastern Montana. Such showers as occurred were mostly limited to a few central and southern localities. The past week was the warmest since the first part of July, and generally one of the driest. The hot weather helped accelerate growth of irrigated crops, but was generally unfavorable to dryland crops. Late sown grain crops suffered most by weed growth and hot wind damage, and the general prospects for grain production was further reduced in the important dryland farming areas. Harvest of winter wheat is now reported from all sections of the State, with yields ranging widely but averaging mostly poor. Some spring wheat and barley is being harvested in a few Yellowstone Valley localities, and cutting of wheat and other small grains for hay to avoid further grasshopper damage is reported from east central Montana counties. The hot dry weather of the past week was generally reported as reducing the spring wheat prospects, especially for late sown wheat, which a short time ago gave promise of making some crop in many counties.

In case of irrigated crops, growing conditions have been mostly favorable, with the hot weather forcing a needed growth. Irrigation water supplies were reported ample in most districts, except in parts of southwestern areas. Sugar beets, irrigated corn, and feed crops and such crops as beans and alfalfa appear to have made good progress. In some localities, irrigated alfalfa is now close to second cutting, with prospects of fair to good yields. Sugar beets and beans are reported doing well in Yellowstone County, where repairs to irrigation ditches damaged in the June flood have now been completed.

Livestock is generally in good condition, and prospects for some pasture feed and improved supplies of stock water are reported from northeastern Montana as a result of recent rains. Range feed is beginning to cure in Carbon and Powder River counties, and on the lower ranges elsewhere. Feed is still growing, however, on most of the mountain range lands. Wool is moving to market, with some recent sales showing a little improvement in price. There have been a few early cattle shipments reported.

Cricket damage has apparently passed its peak, but grasshopper damage continues, with control programs still in progress in many counties.

Farm labor demand, except in cases of ranch hands and help for haying, has been curtailed somewhat due to the declining prospects for a grain crop harvest. Some scarcity, however, was reported from Carbon County.

* * * * * * * * *

TEMPERATURE AND PRECIPITATION DATA, WEEK ENDING JULY 27, 1937

Station	Temperature Highest	Temperature Lowest	Sunshine Percent of Possible	Precipitation (inches and hundredths) Total This week.	Total since April 1, 1937	Total since April 1 to July 28, 1936.
Billings	100	59	*	T	6.77	4.61
Bozeman	90	50	*	0.18	8.99	4.45
Cut Bank	90	45	*	0.00	5.98	3.84
Fort Peck	101	53	*	T	3.82	1.68
Glendive	103	52	*	0.00	6.13	4.67
Great Falls	94	54	*	T	4.78	4.20
Havre	94	54	90	0.04	6.63	2.55
HELENA	92	54	89	0.24	4.01	4.85
Kalispell	90	52	90	0.00	5.69	3.90
Lewistown	95	48	*	0.05	5.94	5.90
Malta	96	49	*	T	6.45	2.73
Miles City	102	58	96	T	5.43	2.48
Missoula	98	54	84	0.00	3.26	4.58
Poplar	99	52	*	0.00	4.80	3.34

*No data.

Series - 1937 - No. 16.
Helena, Montana,
July 28, 1937.

W. E. Maughan, Weather Bureau.
Jay G. Diamond, Bureau of Agricultural Economics.

The following county summaries of crop conditions for the week ending July 24, 1937 are furnished through the courtesy of Director J. C. Taylor, Montana State Extension Service.

BEAVERHEAD: Scattered rains first part of week; growing conditions good. Stacking first crop of alfalfa with fair to good yields; very slight damage to some of the hay from rain; preparations have started for wild hay harvest; pea and grain crops good. Livestock in good shape, with range good. Activity in wool and lambs slowed up.

BIG HORN: Scattered showers early in the week. Hail in northeast did some damage. Winter wheat harvest under way with reports of yield ranging from low to high. Some splendid wheat crops in south part of county and under irrigation. Cultivated and irrigated crops making real progress. Ample irrigation water for valley crops. Range in good condition, which is reflected in shape of cattle. Some labor shortage due to number men needed on construction of sugar factory, court house, and cricket control. Crickets subsiding, and grasshoppers less numerous, though control is still going on.

BLAINE: No precipitation. Growing conditions excellent in Milk River Valley, but all fields on dry land have been injured to such an extent that they are beyond recovery. All crops in the irrigated district have shown excellent growth this past week. Weeds are taking all late sown grain, and it is doubtful whether there will be sufficient fields harvested in the county that will return seed for another year. Mormon crickets and grasshoppers doing considerable damage both to range and crops in the southern part of the county. Livestock in good condition. Range conditions in the northern part of the county are good. In the southern part, hoppers are doing considerable damage.

CARBON: Week hot and dry for the most part; light showers in the early part of week. Harvesting of wheat begun where binders were used, in the northern and eastern portions of the county, both spring and winter grain being harvested. Alfalfa making good growth and well along toward the second cutting. Crop conditions very good. Livestock in good shape; grasses on ranges getting mature. Labor scarce; hard to secure hay hands because of cricket control and other WPA projects. Cricket work slowing up, even though some very large kills have been reported from dusting. Grasshoppers on the increase in certain portions of the county; much poisoning being done.

CASCADE: No precipitation. Hot dry winds have decreased crop prospects considerably on dry land. Indications are that the wheat crop will be about 20% normal. On irrigated land the first cutting of hay is all in the stack and the second crop is making good growth. Hoeing and thinning of sugar beets is completed and farmers are using large quantities of irrigation water. Cricket poisoning crews have been holding the insects back from crop lands and practically no damage has been reported from either crickets or grasshoppers. There still remains fair supply of range forage and livestock are in good condition. Labor normal.

CHOUTEAU: No precipitation; hot and dry all week. General crop conditions very unfavorable. Winter wheat is turning fast. Harvest will be under way some time next week. Some prospects of a fairly good yield of spring wheat; however, the dry hot weather is cutting it short every day. First hay crop is finished resulting in a very short crop. Outlook for feed reserve to carry cattle on hand at present has been improved by rains of a week ago. No improvement of range conditions, but no movement of cattle. No serious outbreak of grasshoppers; however, spotted reports are coming in. Mormon cricket control in full force.

CUSTER - POWDER RIVER: High temperatures forepart of the week, followed by cooler days and nights. No precipitation of any consequence. All irrigated crops continue to make good growth. Most dryland grain crops going for hay where not complete failure because of thin stands. Some dryland grain bound for threshing, but acreage small. Many oat fields under irrigation have been cut for hay to avoid army worm damage, which was severe the past two weeks. Wild hay being cut, with fairly good yields where flooded. Grass curing on range. Weedy areas need rain. Stock water sufficient, and all stock doing well.

DANIELS: No precipitation. Growing conditions favorable, with moderately warm temperatures. Late planted spring wheat that didn't sprout is now making fairly rapid growth in some parts of the county and may, under favorable weather conditons, produce some feed. Summerfallowing is being carried on throughout the entire county. Shipment of livestock has slowed down due to the recent rains, and the grass is now beginning to get green on the range. Labor remains the same. Grasshoppers are being reported in certain areas.

DAWSON: Seasonably warm, with one or two rather severely hot days. Balance of time has not been uncomfortable, and the nights generally are cool. No precipitation. Most of the small grain crops are being cut as rapidly as possible to prevent further grasshopper damage, with scattered fields near enough maturity to provide small grains; others are being cut primarily for feed. Corn crops quite generally are encouraging as the hoppers have not attacked them severely and they seem to be growing well. The rains improved the stock conditions to some extent, although the native grass has not developed as much as apparent. Many of the ranges are weedy, and the total forage is relatively small. Hoppers have been flying in large numbers each day and doing considerable damage over wide areas of the county; apparently the infestation has been caused by migrating hoppers.

(Continued on Page 2.)

FALLON - CARTER: Hot, dry weather prevailed this past week, with high winds during a certain portion of the time. Moisture conditions fair. Harvest is under way. All grain crops ripening fast. Corn showing excellent growth, pointing to a very fine corn year. Considerable movement of grasshoppers this past week. Grasshopper poison still being given out. Livestock continuing to show good gains. Grass good.

FERGUS: No precipitation; dry and hot during week. Some grain ripening very fast partially due to weather conditions. First winter wheat being harvested, with many folks getting ready to start next week. Some yields reported good, but most yields very low, with probably 500 farms not having any grain to harvest except for hay. Livestock doing well, with hoppers damaing range so that some folks will be out of feed in the next three weeks. This condition is most prevalent in the southeast part of the county. Hoppers very numerous and fully developed and moving. Poison work slowing up.

FLATHEAD: Clear, hot and windy all week. All crops maturing too rapidly to result in optimum weight of grain and yield per acre. Yields over half of the county will be reduced as much as 30% under earlier estimates, varying from almost total abandonment in a few extreme cases to very little damage on the better types of soil. Pea harvest commenced the first of the week and barley and winter wheat will be ready for cutting next week. The truck crops, with the exception of berries, have been making good growth and yields. Condition of range livestock continues good, with plenty of feed left on the range. The condition of farm livestock is good at present, but pastures are getting very short and supplemental feeding will be necessary to maintain these animals in their present flesh. Labor adequate.

GALLATIN: Weather generally clear and warm, except for a hard shower Friday, with a trace of hail in south portion of county, which did no damage. Grain harvest started in binding of grain. No combining started as yet. First cutting of hay practically all in the stack. Irrigation continues under earlier right ditches. Canning pea harvest continues in full swing, with cannery running 24 hour shifts. Eight cars of wool of the Gallatin Valley pool were shipped this week after being sold at 31½¢.

GLACIER: Hot the latter part of week; cool first part. No general precipitation. Crops generally in good condition. Rye hay almost all cut. Winter wheat almost ready to cut. Early oats maturing. Southeastern part of county needs rain badly for grain and grass. Blown grain seems to be standing hot weather well. Livestock in excellent shape.

GOLDEN VALLEY - MUSSELSHELL: No moisture during past week. Extreme warmth, with temperature ranging around 100° The ranchers have begun combining winter wheat. In areas where there is any crop at all, the wheat is ranging from five to twenty-five bushels per acre. There is not much possibility for spring wheat harvest in either county. Livestock are in the best flesh they have been at any time since 1928. The range is still in very good condition.

HILL: No precipitation the past week. Cool weather and exceptionally cool nights have a favorable influence on the filling of all grain crops. Harvesting of winter wheat under way. Harvesting of rye and barley will start next week. Ranges are steadily improving. This is the result ofthe precipitation of last week. Livestock in good condition. Labor balanced.

JUDITH BASIN: Precipitation slight; temperatures high; wind blowing moderate. Some crops have improved with moisture received last week. Weeds are exceptionally bad. Not to exceed 25% of the crop land in the county will be harvested. Some sections stand a good chance of cutting second crop alfalfa. Weed growth has stopped soil blowing on crop land. Conditions somewhat improved over last week, but still serious due to early drouth. Rains have improved range. Most of stock in fair condition. Need considerably more rain for fall and winter feed. Over 50% of the farmers in need of employment.

LAKE: Hot, with some winds, causing many crops to prematurely develop. Second crop of alfalfa growing rapidly. Winter wheat being harvested, with average yields reported. Peas all harvested in Moiese area, and being harvested in balance of county. Crested wheatgrass being cut for seed. Irrigation water getting rather scarce. Some pastures and most of lower ranges drying up rapidly.

LEWIS & CLARK - BROADWATER: No rains this week. Temperatures right for best growing conditions. Crops in general slightly better than a year ago although a late spring with intervening dry spell has affected crop prospects considerably. Potatoes in Helena Valley in fair to good condition and comparable to last year. Sugar beets in Townsend area are rated as fair. Feed situation an improvement over last year at this time. Stock in general in good condition. Control measures still being used on grasshoppers, but poisoning activity gradually tapering off.

MADISON - JEFFERSON: Warmest week for season, with no precipitation. Where moisture was sufficient, good growth was made by plants. Very favorable haying conditions throughout the week allowed farmers to make rapid progress with their haying, which has been somewhat delayed by rains previous to this week. Hay crop still very short in many localities, while in others the yield is surpassing earlier estimates and is making a normal crop. Winter wheat and some early seeded spring wheat on dry land is turning rapidly. Most wheat crops are thin and headed short. Grasshoppers and Mormon crickets are still causing a great deal of damage in several communities along the east side of both counties. Live-

(Continued on Page 3.)

MADISON - JEFFERSON: (Cont'd.) stock generally good, with feed supplies holding out in the higher ranges. Showers during the past three weeks have kept the lower ranges greener than is normal at this time, and is brightening prospects for good fall grass. Road and dam contractors, as well as mines, have taken most of available supply of local men, so there is an active demand for irrigators and hay hands.

MEAGHER: Cool, no rain; no particular damage. Haying well begun; fair crop. Dry land grain very light. Livestock continues to do very well. Labor demand ahead of supply temporarily. Grasshoppers, crickets, and blister beetles doing considerable damage.

MISSOULA: Moderate weather with no precipitation. Growing conditions slowed up due to lack of moisture from rain and shortage of water in mountain streams for irrigation. Irrigation water plentiful in Missoula River. Haying about completed. Harvesting of winter wheat commenced. Yields of hay will be about 75% and up of normal. Winter wheat is short, with yields about 60% to 80% of normal. Spring grain ripening. Sugar beets and potatoes making good growth. Cherry harvest in full swing; good yields. Upper ranges good to fair. Lower ranges short and dry. Shortage of water. Livestock in good condition. Grasshoppers doing some damage.

PARK: Hot with drying winds. Scattered showers. First crop alfalfa hay mostly stacked. Harvesting of fall rye beginning. Early spring grains, especially barley, expected to be mature enough to bind in about ten days. In spite of previous moisture, crops are beginning to show effects of dry weather. Livestock in fine condition, and best grass in years. Farmers are spreading grasshopper poison on large scale to combat worst threat to good crops.

PETROLEUM - GARFIELD: No precipitation. General growing conditions becoming very acute. A very small percentage of the seeded acreage will be cut for grain. Most forage growth to be cut for hay. Condition of livestock very good.

PHILLIPS: Hot and dry, with moderate winds. Growing conditions good in southern part of county. Lack of moisture north of Milk River. Crop conditions in Milk River Valley good. Dryland crops practically a failure in north and northeastern part of county. Some grain in south and central portions. Late crops making good growth in areas that received rain last week. Alfalfa seed prospects good. Grasshopper damage in spots. Livestock in good condition. Range improving. Prospects for winter feed in all but northeastern part of county.

PONDERA: Weather warm throughout the week. A few light breezes during middle of week. No precipitation. Reseeded wheat following heavy rains of June 11 had appearance of making good crop; recent 10 days of hot weather indicates a material reduction in expected harvest to the extent of approximately 59%. Hay cutting has practically been completed, including flood areas where some was reclaimed. Tonnage will be approximately normal, especially with the additional irrigation water. Range pastures drying up in the medium grass areas. Mountain regions show abundant growth and considerable natural seeding. Livestock still being held with no forced liquidation. Labor balanced.

PRAIRIE: No precipitation; hot and dry. Harvesting of grains getting under way, with binder and header. Early grains were damaged considerably by the hot weather of the Fourth and fifth of July. Many fields are being put up for feed. In western part of county it is impossible to find a field of thistles for hay due to the severity of the drouth. Livestock continuing to improve though a few outfits in the western part of the county were forced to sell due to shortage of winter feed. Labor supply ample.

RICHLAND: No precipitation throughout week, with temperatures rather fair and warm. However, good growing conditions where there has been sufficient moisture. Last week moisture fell over the greater portion of the county, which has tended to start grass on the ranges again and has started the growing of thistles very rapidly, which will make some feed for livestock. There will be no harvesting in the dryland whatsoever, except in rare cases where growers are trying to salvage a little for seed; however, it is very doubtful if more than 5000 acres will be harvested in this way over the entire dryland portion of the county. Sugar beets and other crops in the valley making rapid progress. Quite a little summerfallowing is being done now following the rains of last week. Some growers who had planned on shipping out livestock are now trying to hang on a little while longer with the hope that corn and late feed crops, such as millet, may still make some winter feed. Livestock in fair to good condition. Farmers are eagerly waiting the starting of a WPA program in order that they can get employment to earn sufficient funds to tide them over the winter The army worm is gradually disappearing due to poisoning and their life cycle; however, grasshoppers are appearing in large numbers due to the fact that they are migrating from dryland ranges. Poisoning of both grasshoppers and army worms has continued heavily throughout the entire week.

ROOSEVELT: No precipitation. Weather conditions favorable for growth; slight blowing Thursday on a few fields. Summerfallow being started after rains of previous week. Some feed crops seeded previous to rains showing good growth, where hoppers not present in damaging numbers. Some feed crops being seeded, mainly millet. Grasshoppers numerous and travelling. Outlook for feed crops not promising because of hoppers. Livestock which remain in county mostly being held as result of recent rains.

(Continued on Page 4.)

ROSEBUD: No precipitation, with high temperatures. Combining of dry land wheat started. Yields vary from 3 to 8 bu. Wheat mostly badly shriveled. Late sown grain and forage crops growing well in south part of county. In other areas late crops suffering from lack of moisture and extreme temperatures. Second crop irrigated alfalfa being cut. Army worms still doing considerable damage to oats and corn in irrigated districts. Livestock continuing to do well in all areas. Some winter feed is being secured from poor stands of grain where thistles have made some growth.

SANDERS: Clear, with high temperatures and no precipitation. Too dry for any crop growth except under irrigation. Harvesting winter wheat in full swing. Spring grain ripening fast, with short growth on dry lands account of low moisture. Second cutting hay making little growth with prospect for very short crop on dry land. Livestock very good condition. Heavy shipment of range cattle to market. Low range completely dried out. Mountain range in good condition. Several minor forest fires, but under control within a few hours. Entire Cabinet Forest presents an extreme fire hazard at present.

STILLWATER: Week characterized by high temperatures; few local showers. The high temperatures of the past week have ripened grain very rapidly. Harvest of winter wheat and rye in full swing with most farmers using binders or headers. First load of winter wheat on new crop received in Columbus this week. Grain of good quality. Cricket control work continues, with farmers in cricket areas starting to harvest grain. Although there will be some cricket damage, the farmers in these areas will harvest the best crop in several years. Intensive crops, such as beets, beans, and potatoes, look very good. Livestock in good condition, and putting on good gains. The Stillwater wool pool sold approximately 23,000 fleeces the past week for 32¢. As yet, very little contracting of lambs. No surplus of labor.

SUN RIVER PROJECT: Weather continues hot, with no precipitation the past week. Irrigation mostly caught up, and crops growing in good shape. Most operators busy irrigating.

SWEETGRASS: Precipitation just a trace. Growing conditions on irrigated sections rapid. Weather hot and very little local showers. First cutting of hay practically completed, except wild hay, which is being harvested. Drouth still taking its toll on dry land crops. Fall rye mostly cut for hay, with 50% crop. Fall wheat will probably average the seed used. 50% of spring crop on dryland still has a chance if moisture appears suddenly. Pastures and range are the best in several years. Livestock are growing and gaining rapidly. Insects doing considerable damage to grains and second cutting alfalfa.

TETON: Maximum temperature has been ranging between 85 and 90 practically every day. Wind causing further deterioration of crops and range. No precipitation. Early seeded wheat in eastern part of county will probably be harvested within a week or ten days. The hot dry winds of the past week have further reduced the crop prospect until at the present time it is about 25% of normal. In some areas the farmers will do well to be able to harvest enough for their seed requirements for 1938. Late crops are suffering badly from lack of moisture and heat. Harvesting of wild hay is in progress all over the county, with dry land wild hay only about 25% of normal. Where they were able to get some run-off from streams this spring in the mountain meadow land area, it will run about 65% to 70% of normal. First cutting of alfalfa practically completed, with yields a little lighter than normal. Range land badly in need of rain. Livestock condition is fair to good.

ROOSE: Hot and dry. Crops ripening rapidly and it is expected that harvesting of grains will be started within next two weeks. Small grains harvested for hay started this week and will be in full swing next week. Most operators reporting tonnage greater than last year. Cattle and sheep in excellent condition. Labor plentiful.

VALLEY: The first two days of the week characterized by local showers; the balance extremely hot weather. Two days of hot winds. Crop conditions unchanged. Wheat fields might have made chicken feed in the dry land area, but are now gone. Blue joint haying is being started. Second cutting of alfalfa will be started in a few days in some localities. Beets doing very good at this time. Livestock condition unchanged. Recent showers greening up the grass and in some localities they will be able to hold their stock until early fall. Reservoirs and pot holes well filled at this time.

WHEATLAND: Hot and dry during the past week. In extreme southern part of county grasshoppers are working gradually and are cleaning grass. Poisoning of gophers and grasshoppers still in progress.

WIBAUX: Weather warm during week. No precipitation. Numerous reports of hoppers cutting heads on grain. The amount of wheat, oats, and barley cut for grain very small. A large number of farmers will not get sufficient hay for small amount of livestock. 80% of farmers looking for work. Several carloads of cattle shipped this week.

YELLOWSTONE: Hot and dry all week; no precipitation. Winter wheat harvest in dry land sections just starting, and spring wheat harvest starting on irrigated land. Haying is completed and second crop has good start. Water was turned in the B.L. and I. ditch the first of the week, and farmers busy irrigating on the Billings Bench, where they have had no irrigation water since the 12th of June. Beans and beets looking good. Livestock in good condition. Range on dryland or upland areas beginning to show lack of moisture. Springs and waterholes in good shape. Cricket control work in full swing. Crickets are moving south away from the river. Grasshoppers very spotted, doing little damage, except in the extreme northeastern end of county.